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| 09/826,134 | 04/04/2001 | David K. Vavro | INTL-0546-US (P11105) | 2324 |

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EXAMINER

MEONSKA, TONIA L

| ART UNIT | PAPER NUMBER |
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2181

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,134

Applicant(s)

VAVRO, DAVID K.

Examiner

Tonia L. Meonske

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming
FRITZ FLEMING
Supervisory PRIMARY EXAMINER 4/1/2006
GROUP 2100
AU 2181

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. Referring to claim 1, in line 5, the limitation “enabling the given central processing unit to reset its indicator...” is unclear. According to Merriam-Webster’s online dictionary, the definition of enable is “to make possible”. Is the claim stating to enable, or make it possible, for the central processing unit to reset its indicator, OR actually causing the central processing unit to reset its indicator? Examiner suggests changing “enabling” to “causing”.

3. For similar reasons, claims 8 and 11-17 are also unclear. Examiner suggests the following changes:

a. In claim 8, line 1,

i. please change “enabling” to “causing”.

a. In claim 11, line 2,

b. claim 11, line 6,

c. claim 12, line 2,

d. claim 13, line 2,

e. claim 14, line 2,

f. claim 15, line 2,

g. claim 16, line 2, and

h. claim 17, line 2

- i. please change “enable” to “cause”. Appropriate correction is required.

4. Claims 2-10 are rejected for incorporating the defects of claim 1.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title:

6. Claims 1, 8, and 11-17 are rejected under 35 U.S.C. 101 because they fail to produce a useful, concrete, and tangible result.

7. Referring to claim 1, the result of the claim appears in lines 5-6 which is “enabling the given central processing unit to reset its indicator when the data in said register is no longer useful to the given central processing unit”. This claimed result is not tangible. According to Merriam-Webster’s online dictionary, the definition of enable is “to make possible”. Making something possible is not a tangible result. Appropriate correction is required. Examiner suggests changing “enabling” to “causing”.

8. Referring to claim 8, the result of the claim appears in lines 1-2 which is “enabling a plurality of central processing units to access a register at the same time.” This claimed result is not tangible. According to Merriam-Webster’s online dictionary, the definition of enable is “to make possible”. Making something possible is not a tangible result. Appropriate correction is required. Examiner suggests changing “enabling” to “causing”.

9. Referring to claim 11, lines 2 and 6, the limitation “enable” appears in the result of the claim. This claimed result is not tangible. According to Merriam-Webster’s online dictionary, the definition of enable is “to make possible”. Making something possible is not a tangible result. Appropriate correction is required. Examiner suggests changing “enable” to “cause”.

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10. Now assume for the sake of argument that the 101 problems with the term “enable” in claim 11, lines 2 and 6 are non-existent. In claim 11, lines 1 and 2, the limitation “if executed” means that the instructions are not necessarily executed. This means that sometimes a useful, concrete, and tangible result is produced and other times not. When the instructions are not executed then the claim fails to produce a useful, concrete, and tangible result. Appropriate correction is required. Examiner suggests changing “if executed” to “when executed”.

11. Referring to claims 12-17, in line 2 of each claim the limitation starting with “enable” is the result of the claim. This claimed result is not tangible. According to Merriam-Webster’s online dictionary, the definition of enable is “to make possible”. Making something possible is not a tangible result. Appropriate correction is required. Examiner suggests changing “enable” to “cause” in claims 12-17.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chastain et al., US Patent 5,050,070 (hereinafter Chastain).

14. Referring to claim 1, Chastain has taught a method comprising:

- a. providing a register accessible by a plurality of central processing units (abstract, Figure 1, elements 46 and 48); and

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b. indicating whether data in said register is available for a given central processing unit by providing different indicators assigned to each of a plurality of central processing units (Figure 3, communication register frame, column 7, line 8-column 8, line 43, column 9, lines 4-47, column 5, line 5-column 6, line 16) and enabling the given central processing unit to reset its indicator when the data in said register is no longer useful to the given central processing unit (column 8, lines 29-36, "fork posted").

15. Referring to claim 2, Chastain has taught the method of claim 1, as described above, and including indicating for each of a plurality of central processing unit whether the data is available for a given central processing unit (column 5, lines 5-column 6, line 16, "fork lock", "fork posted", and other info stored in Figure 3).

16. Referring to claim 3, Chastain has taught the method of claim 2, as described above, and including requiring a central processing unit to wait to execute an instruction until the data it needs to execute the instruction is available in one or more registers (column 8, lines 35-43).

17. Referring to claim 4, Chastain has taught the method of claim 3, as described above, and including providing a bit for each item of data indicating whether a given central processing unit can access that data (column 8, lines 29-43).

18. Referring to claim 5, Chastain has taught the method of claim 4, as described above, and including resetting said bit when said data is accessed by a given central processing unit (column 8, lines 29-43).

19. Referring to claim 6, Chastain has taught the method of claim 1, as described above, and including preventing any central processing unit from writing data to said register until all of the

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indicators for the plurality of central processing units indicate that the data is no longer useful to any other central processing unit (column 8, lines 29-43, "fork lock").

20. Referring to claim 7, Chastain has taught the method of claim 6, as described above, and including indicating the central processing unit which will utilize the data written into the register (Figure 3, column 8, lines 3-43).

21. Referring to claim 8, Chastain has taught the method of claim 1, as described above, and includes enabling a plurality of central processing units to access a register at the same time (column 4, lines 32-46, semaphores).

22. Referring to claim 9, Chastain has taught the method of claim 1, as described above, and including providing specialized central processing units for mathematical operations (Figure 1, element 57, column 7, lines 9-26) and for memory (column 4, lines 17-24).

23. Referring to claim 10, Chastain has taught the method of claim 1, as described above, and including providing an input central processing unit (column 4, lines 1-10 and 46-50, All of the n processors input data.), an output central processing unit (column 4, lines 1-10 and 46-50, All of the n processors output data.) and coupling said input, output and specialized central processing units to said register through a cross-bar connection (Figure 1, column 4, lines 1-10 and 46-66, elements 50, 51, and 52).

24. Claims 11-17 do not recite limitations above the claimed invention set forth in claims 1-7, respectively, and are therefore rejected for the same reasons set forth in the rejection of claims 1-7 above.

Response to Arguments

25. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L. Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, with every other Friday off.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

Supervisory
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